

PATENT SPECIFICATION (11)

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DRAWINGS ATTACHED

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(54) BASE TUBE FOR A LAMP HAVING A PINCH SEAL

- (71) We, EGYESULT IZZOLAMPA ES VILLAMOSSAGI RESZVENYTARSASAG, a Hungarian body corporate of 77, Vaci ut, Budapest IV., Hungary, do hereby declare the invention, for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—
- The invention relates to a base tube or socket body for a lamp.
- With certain types of lamp which are manufactured with pinch seals, where the position of the lamp in the base as well as the fixing of the lamp to the base and the securing of the current supply conductors are important, special base tubes are employed. These are mainly used in connection with motor vehicle lamps and lamps for use in projection apparatus. For these base tubes, various types of constructional forms, but also different constructional forms within one type, are known, but these show certain disadvantages.
- Thus, one known base tube construction does for example have the disadvantage that the welding of the earth, conductor inside a closed box-shaped section has to be effected through an opening, whereby the quality of the weld can only be controlled with fairly great difficulty. The production of a tube constituting a closed box necessitates welding operations which have to be carried out after the stamping. The independent, U-shaped bottom part serving for fixing cables is likewise secured by a separate welding or brazing operation to the tube constituting a closed box.
- Substantially the same problems arise with other known base constructions, where the base tube forming a closed box is produced by folding and flanging, in which the welding of the earth conductor is likewise effected through cut-outs and the fixing of the cables is effected by providing an additional part and subsequently fitting on a U-shaped bottom-covering part.
- Another base tube construction which differs from those referred to above is also known, this consisting of one part and being characterised by a construction which starts from a condition bent beforehand through 90° at the time of stamping. The last-mentioned design already has the property that the lamp can be inserted in the open position of the base tube and the welding of the conductors can likewise be effected in this favourable condition. However, it has the disadvantage that the tube has to be bent up on to the inserted lamp after the latter has been welded in position, whereby a completely indefinite bottom radius is formed, which can be objected to on aesthetic grounds; also the recess to be provided for the resilient stirrip which serves for fixing the lamp in the fitting cannot be formed, because of its stiffening action.
- The disadvantages of the solutions as described above are obviated by the solution provided according to the invention for the base tube construction, and the base conforms to all aesthetic and functional requirements, while the mounting of the base and also the necessary welding operations can be carried out while being easily and satisfactorily controlled.
- The invention provides a base tube for a lamp having a pinch seal comprising two sheet metal halves, one of the tube halves comprising a preformed clip for holding a supply cable and formed from the sheet metal itself, two spring tongues adapted to engage in slots or grooves in the other tube half to form a mechanical connection between the two tube halves, and a stepped tongue adapted to be welded to a conductor extending from the pinch seal of the lamp, and the other tube half comprising a part bent to U-shape which is formed from the sheet metal itself and is adapted to engage over the preformed clip of the one tube half to form a further mechanical connection between the two tube halves.
- The base construction according to the invention is described in detail by reference to one constructional example shown in the accompanying drawings, wherein:
- Figure 1b shows a cross-section and Figure

1a a longitudinal section through the lower half of the base tube,

Figure 2 shows the lower half of the base tube divided in the pinching plane,

5 Figure 3 shows the upper and bottom-closing half of the base tube divided in the pinching plane,

Figure 4 is a perspective view of the completed lamp ready for use, and

10 Figure 5 shows the lower half of the base tube according to the invention and what is fitted thereto, in perspective.

According to the reference numerals which are used in the Figures, the reference 15 1 shows the lower half of the tube and also its most important functional parts, such as the clip 2 for holding a supply cable 20, the outwardly bent tongue 3, to which the earth conductor extending from the pinch seal of the lamp is to be welded, the cooling 20 apertures 4, for ventilating the pinch seal, the spring tongues 5, which are adapted to engage in the cut-outs or slots 12 in the upper half 10, and the reinforcing rib 6, while 10 represents the upper half of the tube, with its most important parts, such as the U-shaped bottom plate 11 and the cut-outs or slots 12.

Figures 4 and 5 show the connecting cable 20, the welding position 21, for connecting the cable with the other conductor extending from the pinch seal, the welding position 22 of the base member with the earth conductor and also the base ring 23.

35 The base ring 23 is only shown for the purpose of completeness and has no connection with the invention.

The lower half of the tube (Figures 1 and 2) serves simultaneously for holding the lamp and for fixing the current supply cable, the fixing of the cable 20 being assured by the preformed clip 2 formed from the actual sheet material of the base itself. The earth conductor of the lamp is welded to the tube half 1 at the stepped and outwardly bent welding position 3, where this welding operation can be carried out extremely easily and in a satisfactorily controllable manner, since this position is freely accessible from above and also from all sides. In a corresponding manner, the same advantages also apply as regards the other welding position 21 of the second conductor.

55 The two halves of the tube, after having been fitted together, are held together by the U-shaped bottom plate 11 of the upper half of the base tube (Figure 3) which engages over the clip 2. The plate 11 also comprises the reinforcing depression which serves to accommodate the spring stirrup which is generally used at the time of inser-

tion into the fitting. The holding together of the two base halves is also assured by means of the action as described above of the spring tongues 5 engaging in the slots or grooves 12. 65

Essential features of the constructional example of the base tube construction according to the invention, as described above, are that the base tube consists of two halves, an upper half and a lower half, divided in the pinching plane of the lamp, and capable of being brought together, it being possible for the separate halves to be manufactured extremely easily and economically in a manner suitable for mass production by stamping, while the working operations at the time of fitting the base are restricted to a minimum. In addition to having the advantages already discussed above, the solution which has hereinbefore been fully described also has the additional advantages that the base-mounting procedure can for the major part be made automatic, because of the simplicity and the good supervision 85 of the separate parts of the operation.

WHAT WE CLAIM IS:—

1. A base tube for a lamp having a pinch seal, comprising two sheet metal halves, one of the tube halves comprising a preformed clip for holding a supply cable and formed from the sheet metal itself, two spring tongues adapted to engage in slots or grooves in the other tube half to form a mechanical connection between the two tube halves, and a stepped tongue adapted to be welded to a conductor extending from the pinch seal of the lamp, and the other tube half comprising a part bent to U-shape which is formed from the sheet metal itself and is adapted to engage over the preformed clip of the one tube half to form a further mechanical connection between the two tube halves. 90 95 100 105

2. A base tube according to claim 1, including stiffening grooves extending longitudinally.

3. A base tube according to claim 1 or 2, including cooling openings for ventilating the pinch seal. 110

4. A base tube for a lamp substantially as herein described with reference to and as illustrated in the accompanying drawings.

For the Applicants,
LLOYD WISE, BOULY & HAIG,
Chartered Patent Agents,
Norman House,
105—109 Strand,
London, WC2R 0AE.

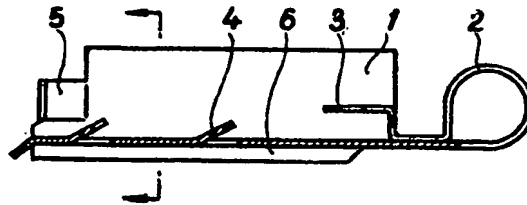


Fig. 1a

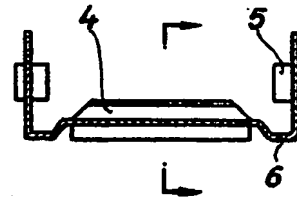


Fig. 1b

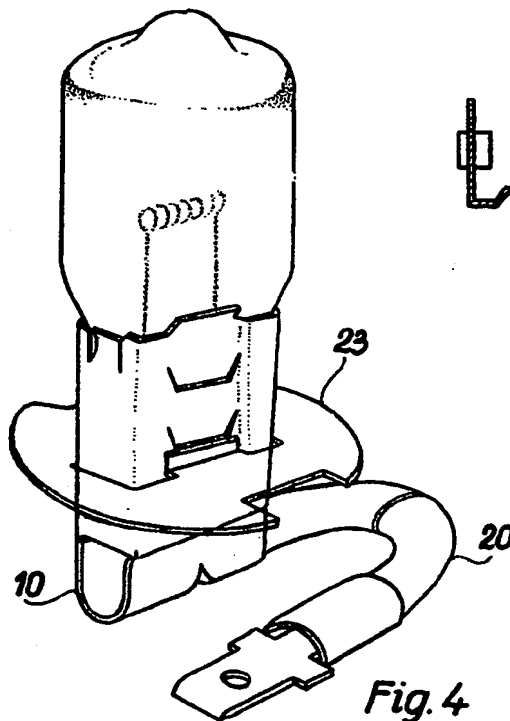
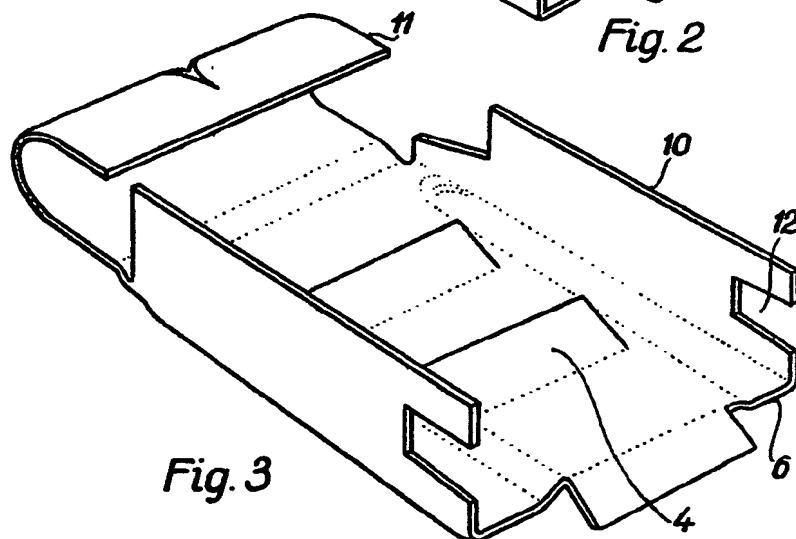
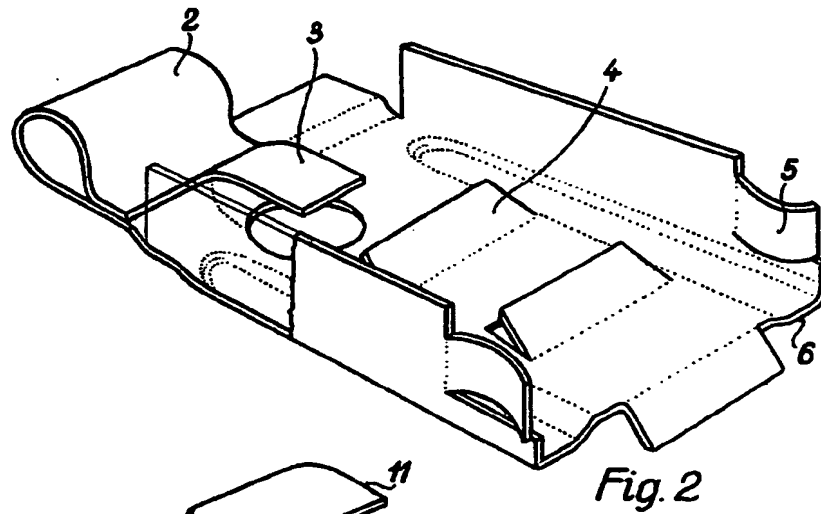


Fig. 4

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Sheet 2



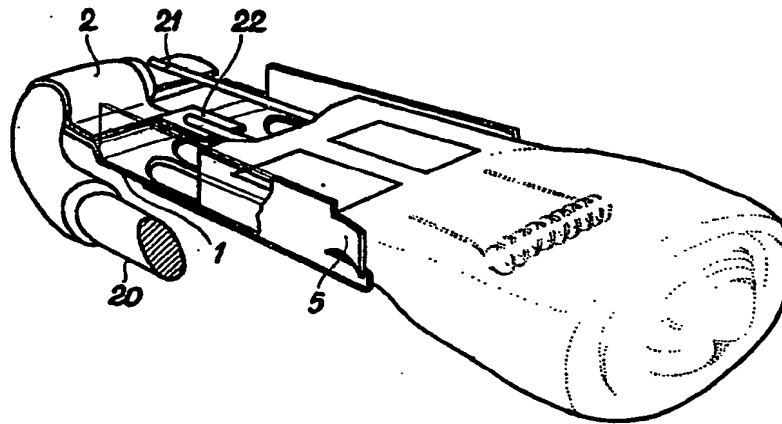


Fig. 5